

AMENDMENTS TO THE CLAIMS:

Please cancel Claims 23, 24, 33, 34, 36, 53, 54, 56, and 59 through 61 without prejudice to or disclaimer of the subject matter recited therein.

1-16. (Cancelled)

17. (Previously Presented) A gateway for use in a system wherein a first apparatus, said gateway, and a second apparatus are in a TCP/IP network, wherein the source apparatus, said gateway, and the second apparatus have different IP addresses, said gateway comprising:

a packet receiving unit that is configured to receive a packet addressed at the IP level from the first apparatus to the second apparatus; and

a service plan determining unit that is configured to determine a level of service subscribed to by a user of the first apparatus;

a throttling unit that is configured to throttle the user of the first apparatus by (a) modifying the value of the TCP window size field of the packet so as to change the value from a value present in that field in the packet received by said packet receiving unit in accordance with (1) the level of service subscribed to by the user of the first apparatus and (2) bandwidth usage associated with the user of the first apparatus, and (b) sending the so modified packet to the second apparatus so that the second apparatus receives the so modified packet that has, in its TCP window size field, a value different from the value present in that field in the packet received by said packet receiving unit,

wherein the packet received by said packet receiving unit has, as its source IP address, the IP address of the first apparatus, and has, as its destination IP address, the IP address of the second apparatus, and

wherein the modified packet sent to the second apparatus by said throttling unit has, as its source IP address, the IP address of the first apparatus, and has, as its destination IP address, the IP address of the second apparatus.

18. (Previously Presented) A gateway according to Claim 17, wherein the bandwidth usage is measured as an amount of data per unit of time.

19 - 20. (Cancelled)

21. (Previously Presented) A gateway according to Claim 17, wherein the bandwidth usage is expressed as an average throughput.

22. (Previously Presented) A gateway according to Claim 17, wherein the bandwidth usage is determined using a leaky bucket analysis.

23 - 25. (Cancelled)

26. (Previously Presented) An apparatus according to Claim 17, wherein said throttling unit compares bandwidth usage to a threshold.

27. (Previously Presented) A method for use in a system wherein a first apparatus, a gateway, and a second apparatus are in a TCP/IP network, each of the first apparatus, the gateway, and the second apparatus having different IP addresses, said method comprising:

intercepting by the gateway of a packet addressed at the IP level from the first apparatus to the second apparatus; and

determining a level of service subscribed to by a user of the first apparatus;

determining whether or not to throttle a user of the first apparatus in accordance with (a) the level of service and (b) bandwidth usage by the user;

throttling by the gateway of the user of the first apparatus in accordance with a determination in said determining step that the user of the first apparatus should be throttled, said throttling comprising (1) modifying, by the gateway, of the value of the TCP window size field of the packet received in said intercepting step so as to change the value from a value present in that field in the packet received in said intercepting step and (2) sending the so modified packet to the second apparatus so that the second apparatus receives the so modified packet that has, in its TCP window size field, a value different from the value present in that field in the packet received in said intercepting step,

wherein the packet received in said intercepting step has, as its source IP address, the IP address of the first apparatus, and has, as its destination IP address, the IP address of the second apparatus, and

wherein the modified packet sent to the second apparatus has, as its source IP address, the IP address of the first apparatus, and has, as its destination IP address, the IP address of the second apparatus.

28. (Previously Presented) A method according to Claim 27, wherein the bandwidth usage is measured as an amount of data per unit of time.

29 - 30. (Cancelled)

31. (Previously Presented) A method according to Claim 27, wherein the bandwidth usage is expressed as an average throughput.

32. (Previously Presented) A method according to Claim 27, wherein the bandwidth usage is determined using a leaky bucket analysis.

33 - 36. (Cancelled)

37. (Previously Presented) A gateway according to Claim 18, wherein the transport level window size is the TCP window size field of the packet.

38 - 46. (Cancelled)

47. (Previously Presented) A gateway for use in a system wherein a first apparatus, said gateway, and a second apparatus are in a TCP/IP network, each of the first apparatus, said gateway, and the second apparatus having different IP addresses, said gateway comprising:

packet receiving means for receiving a packet addressed at the IP level from the first apparatus to the second apparatus;

service plan determining means for determining a level of service subscribed to by a user of the first apparatus; and

throttling means for throttling a user of the first apparatus by modifying the value of the TCP window size field of the packet received by said packet receiving means so as to change the value from a value present in that field in the packet received by said packet receiving means in accordance with (1) the level of service subscribed to by the user of the first apparatus and (2) bandwidth usage associated with the user of the first apparatus,

wherein the second apparatus receives the modified packet that has, in its TCP window size field, a value different from the value present in that field in the packet received by said packet receiving means,

wherein the packet received by said packet receiving means of said gateway has, as its source IP address, the IP address of the first apparatus, and has, as its destination IP address, the IP address of the second apparatus, and

wherein the modified packet sent to the second apparatus has, as its source IP address, the IP address of the first apparatus, and has, as its destination IP address, the IP address of the second apparatus.

48. (Previously Presented) A gateway according to Claim 47, wherein the bandwidth usage is measured as an amount of data per unit of time.

49 - 50. (Cancelled)

51. (Previously Presented) A gateway according to Claim 47, wherein the bandwidth usage is expressed as an average throughput.

52. (Previously Presented) A gateway according to Claim 47, wherein the bandwidth usage is determined using a leaky bucket analysis.

53 - 56. (Cancelled)

57. (Previously Presented) A gateway according to Claim 48, wherein said throttling means modifies the TCP window size field of the packet.

58 - 61. (Cancelled)